SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

April 2003

Prepared by the Office of the Delaware River Master Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during April was in the normal range. The maximum daily mean discharge of 18,700 cfs occurred on April 1. The minimum daily mean discharge was 4,760 cfs on April 26.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during April was 9,765 cfs, which is 84 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 10,130 cfs, or 72 percent of median (water years 1961-90).

On the basis of a 5-station average, precipitation during April was 2.63 inches, which is 70 percent of the 62-year average. The maximum daily-average precipitation during the month was 0.55 inches on April 27. Precipitation in the upper Delaware River Basin during the past 12 months was 3.86 inches more than the long-term average. Precipitation during April was 1.11 inches less than the long-term average for the month.

Combined storage May 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 100 percent of capacity above the point of maximum depletion. The combined storage of 272 billion gallons was 5 billion gallons less than that of one month ago and 103 billion gallons more than that of one year ago. Median storage on the first day of May in 35 years of record is 271 billion gallons.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during April were below average in 7 of the wells. Water levels in 11 of the wells were above March 2003 levels, and water levels in 9 of the wells were above April 2002 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Apr. 2002		May 2002 to April 2003						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
May	4.19	43.11	5.94	46.97	142	109	+1.75	+3.86	
June	3.96	38.92	5.74	41.03	145	105	+1.78	+2.11	
July	4.07	34.96	1.32	35.29	32	101	-2.75	+.33	
Aug.	3.83	30.89	3.31	33.97	86	110	52	+3.08	
Sept.	3.86	27.06	5.40	30.66	140	113	+1.54	+3.60	
Oct.	3.35	23.20	6.30	25.26	188	109	+2.95	+2.06	
Nov.	3.79	19.85	3.68	18.96	97	96	11	89	
Dec.	3.35	16.06	4.68	15.28	140	95	+1.33	78	
Jan.	2.98	12.71	2.38	10.60	80	83	60	-2.11	
Feb.	2.63	9.73	2.59	8.22	98	84	04	-1.51	
Mar.	3.36	7.10	3.00	5.63	89	79	36	-1.47	
Apr.	3.74	3.74	2.63	2.63	70	70	-1.11	-1.11	

Note: Amount shown in cumulative columns is total from month shown to present.

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2001	2003	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
April (observed)	31,560 (1940)	11,660	3,322 (1985)	9,765	84
April (adjusted)	33,010 (1940)	13,870	3,847 (1946)	10,130	73
May (observed)	16,090 (1943)	6,998	2,215 (1965)		
May (adjusted)	18,970 (1989)	8,234	2,944 (1941)		

^{*} Revised since last month.